

2011 Annual Drinking Water Quality Report

(Consumer Confidence Report)



DYESS AIR FORCE BASE
Biosenvironmental Engineering Flight
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Phone Number: 325-696-2325

SPECIAL NOTICE

Required language for ALL community public water supplies:

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immuno-compromised persons such as those with cancer undergoing chemotherapy; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Turbidity
Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2011	Turbidity	0.2	100	0.3	NTU	Soil runoff

Total Coliform REPORTED MONTHLY TESTS FOUND A TOTAL OF 0 COLIFORM BACTERIA WITH A TOTAL MAXIMUM CONTAMINANT LEVEL OF 1 IN A MONTH. THE MAXIMUM CONTAMINANT LEVEL GOAL IS 0. THERE WERE NO VIOLATIONS. SOURCE OF CONTAMINATION IS NATURALLY PRESENT IN THE ENVIRONMENT.
Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2011	Bicarbonate	141	79	176	n/a	ppm	Corrosion of carbonate rocks such as limestone
2011	Chloride	167	148	202	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2011	pH	8.3	8.1	8.4	>7.0	units	Measure of corrosivity of water.
2011	Sodium	97.8	87.5	117	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity
2011	Sulfate	108	87	145	300	ppm	Naturally occurring, common industrial byproduct; byproduct of oil field activity
2011	Total Alkalinity as CaCO ₃	115	65	144	N/A	ppm	Naturally occurring soluble mineral salts
2011	Total Dissolved Solids	368	519	656	1000	ppm	Total dissolved mineral constituents in water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

WATER SOURCES: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants. *Sources of contaminants can be found on page 2.

En Español
Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (325) 696 - 2325 - para hablar con una persona bilingüe en español.

Public Participation Opportunities

Date: N/A
Time:
Location: 880 3rd St, Dyess AFB, TX
Phone Number: 325-696-2325

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call SSGT Weathers at 696-2325.

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2010	Lead	2	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2010	Copper	0.72	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Where do we get our drinking water?

Our drinking water is obtained from SURFACE water sources. It comes from the following Lake River Reservoir Aquifer: O HIVE RESERVOIR, LAKE FORT PHANTOM HILL, HUBBARD CREEK LAKE, A Source Water

Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our source water protection strategies. Some of this source water protection information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

All drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL) The highest permissible level of a contaminant in drinking water MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radiative contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

ABBREVIATIONS

Abbreviation	Description
NTU - Nephelometric Turbidity Units	
MFL - million fibers per liter (a measure of asbestos)	
pCi/L - picocuries per liter (a measure of radioactivity)	
ppm - parts per million, or milligrams per liter (mg/L)	
ppb - parts per billion, or micrograms per liter ($\mu\text{g/L}$)	
ppt - parts per trillion, or nanograms per liter	
ppq - parts per quadrillion, or picograms per liter	

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCL/MGL	Unit of Measure	Source of Contaminant
2011	Fluoride	0.48	0.31	0.058	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2011	Nitrite	0.39	0.2	0.19	10	10	ppm	Rainoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

* See Below

Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRL	MRDL	Unit of Measure	Source of Disinfectant
2011	Chloramine Residual	2.21	0.5	4.0	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2011	Total Haloacetic Acids	14.8	11.4	21.2	60	ppb	Byproduct of drinking water disinfection.
2011	Total Trihalomethanes	49.1	30	74.5	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2008	Total Haloacetic Acids	14.3	4.8	20.3	NA	ppb	Byproduct of drinking water disinfection.
2008	Total Trihalomethanes	27.3	15.4	44.6	NA	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, dibromochloromethane, and Bromochloroacetic acid are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2011	Chloroform	1.0	ND	1.0	ppb	Byproduct of drinking water disinfection
2011	Bromoform	32.9	17.1	54.7	ppb	Byproduct of drinking water disinfection
2011	Bromodichloromethane	3.5	2.8	4.2	ppb	Byproduct of drinking water disinfection
2011	Dibromochloromethane	12.4	9.3	16.4	ppb	Byproduct of drinking water disinfection
2011	Bromochloroacetic acid	4.4	3.1	6.3	ppb	Byproduct of drinking water disinfection

* The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.*